



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,461	03/07/2002	Masataka Ito	00862.022541	8794
5514	7590	12/30/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			ISAAC, STANETTA D	
		ART UNIT	PAPER NUMBER	
			2812	

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/091,461	ITO, MASATAKA	
	<b>Examiner</b>	<b>Art Unit</b>	
	Stanetta D. Isaac	2812	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 16 September 2005.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-6 and 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6 and 19 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

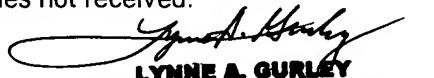
#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 07 March 2002 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.



LYNNE A. GURLEY  
PRIMARY PATENT EXAMINER  
TC 2800, AU 2812

#### Attachment(s)

- |                                                                                                                                              |                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                         | Paper No(s)/Mail Date. _____.                                               |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/22/05</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|                                                                                                                                              | 6) <input type="checkbox"/> Other: _____.                                   |

## **DETAILED ACTION**

This Office Action is in response to the amendment filed 9/16/05. Currently, claims 1-6 and 19 are pending.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) was submitted on 6/22/05 was filed after the mailing date of the Office Action on 6/16/05. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Specification***

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Miyabayashi et al., US Patent 6,660,606

The applied reference has a common Assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Miyabayashi discloses the semiconductor method as claimed. See figures 1-10, and corresponding text, where Miyabayashi teaches, pertaining to claim 1, a method for manufacturing an SOI substrate having an HF defect density not more than 0.05 defects/cm<sup>3</sup>, comprising the steps of: preparing an SOI substrate **108/(S31-S36)** (figure 8; col. 4, lines 53-67); and holding the SOI substrate **105** in a reducing atmosphere containing hydrogen by a holding portion having a surface formed from silicon and annealing the SOI substrate, wherein the holding portion is a member having a silicon film thereon or a member formed from single-crystal silicon or polysilicon (figure 6; col. 1, lines 24-39 the holding member is a silicon film, specifically, silicon carbide; col. 5, lines 58-67; col. 10, lines 50-67).

Pertaining to claim 2, Miyabayashi teaches, wherein the annealing is executed at a temperature lower than a melting point of single-crystal silicon (col. 7, lines 3-11).

Pertaining to claim 3, Miyabayashi teaches, wherein the annealing is executed at a temperature not less than 775 °C (col. 13, lines 30-46).

Pertaining to claim 4, Miyabayashi teaches, wherein the annealing is executed at a temperature not less than 966 °C (col. 13, lines 30-46).

Pertaining to claim 5, Miyabayashi teaches, wherein the annealing is executed at a temperature not less than 993°C (col. 13, lines 30-46).

Pertaining to claim 19, Miyabayashi teaches, a semiconductor device manufacturing method, comprising the steps of: (a) preparing an SOI substrate using the method of claim 1 (figure 6; col. 1, lines 24-39 the holding member is a silicon film, specifically, silicon carbide; figure 8; col. 4, lines 53-67; col. 5, lines 58-67; col. 10, lines 50-67); and (b) forming an active region for an transistor in a semiconductor layer of the SOI substrate prepared in step (a) (col. 5, 4-7; col. 13, lines 4-6 *Note:* the Examiner takes the position that a transistor is an electronic device, as a result, it is inherent that a transistor includes an active region).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-6 and 19 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stanetta D. Isaac whose telephone number is 571-272-1671. The examiner can normally be reached on Monday-Friday 9:30am -6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lebentritt can be reached on 571-272-1873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stanetta Isaac  
Patent Examiner  
December 12, 2005

  
LYNNE A. GURLEY  
PRIMARY PATENT EXAMINER  
TC 2800, AU 2812